Gordon, Kathryn E. et al.			Programmable interconnect structures and programmable integrated circuits	11	19930323	US 5196724 A 19930323	2
Choi, Jeong Yeol	438/600; 438/762; 438/769; 438/956	438/131	Method of improving the reliability of low-voltage programmable 43	. O	20000815	US 6103555 A 20000815	Ľ
Inventor	Current OR Current XRef	Current OR	Title	Pages	Issue Date	Document ID Issue Date Pages	

from Spec

14 US	13 US	12 US	11 US	10 US	9 US	8 US	7 US	6 US	5 US	4 US	3 US	2 US	1 US	ס
4823181 A	4943538 A	5266829 A	5365105 A	5412244 A	5521423 A	5789795 A	RE36893 E	6242335 B1	6249010 B1	5210598 A	5290734 A	5328865 A	5391518 A	Document ID
19890418	19900724	19931130	19941115	19950502	19960528	19980804	20001003	20010605	20010619	19930511	19940301	19940712	19950221	Issue Date
1	9	13	9	15	18	10	9	10	11	æ	11	9	11	Pages
Programmable low impedance anti-fuse element	Programmable low impedance anti-fuse element	ble e element	Sidewall anti-fuse structure and method for making	Electrically-programmable low-impedance anti-fuse element	Dielectric structure for anti-fuse programming element	Methods and apparatus for fabricationg anti-fuse devices	Anti-fuse structure for reducing contamination of the anti-fuse material	Method for fabricating isolated anti-fuse structure	Dielectric-based anti-fuse cell with polysilicon contact plug and method for its manufacture	Semiconductor element having a resistance state transition region of two-layer structure	Method for making anti-fuse structures	Method for making cusp-free anti-fuse structures	Method of making a field programmable read only memory (ROM) cell using an amorphous silicon fuse with buried contact polysilicon and metal electrodes	Title
257/530	438/215	257/530	257/530	257/530	257/530	257/530	257/530	438/600	257/50	257/530	438/600	438/600	438/281	Current OR
257/296; 257/640; 365/96	438/333; 438/467; 438/600		57/390; 65/96	257/50; 257/607	257/209; 257/50; 257/529	438/131	257/50; 257/751; 257/752; 257/764	438/131; 438/467	257/530		148/DIG.1; 148/DIG.55; 257/530; 438/639; 438/647	438/627	148/DIG.1; 438/132; 438/601	Current XRef
Mohsen, Amr M. et al.	Mohsen, Amr M. et al.	Hamdy, Esmat Z. et al.	Liu, David K. et al.	Hamdy, Esmat Z. et al.	Shinriki, Hiroshi et al.	Sanchez, Ivan et al.	Pramanik, Dipankar et al.	Sher, Joseph C. et al.	Bergemont, Albert et al.	Nakazaki, Yasunori et al.	Boardman, William J. et al.	Boardman, William J. et al.	Bhushan, Bharat	Inventor

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PLUS Search Results for S/N 09/682,628, Searched June 26, 2002 (Top 50)

E002044	E774044	5070240	C 40 4 4 4 0	0404405
5903041	5774011	5978248	5434448	6124165
6156588	5789795	6016001	5493146	RE36893
6240033	6061264	6021079	5521423	6140692
5793094	6096580	6233194	5572458	6159836
5210598	6174797	4823181	5573970	6242335
5416355	5278784	4899205	5625219	6249010
5290734	5365105	5266829	5625220	4876220
5328865	5427979	5331196	6060785	4881114
5391518	5565703	5391513	6096571	4943538
5672994	5742555	5412244	6124194	5365104

Most Frequently Occurring Classifications of Patents Returned From A Search of 09/682,628 on June 26, 2002

Combined Classifications

- 28 257/530
- 14 438/600
- 13 257/50
- 10 365/96
- 7 365/225.7
- 7 438/131
- 7 438/467
- 6 257/529
- 4 438/132
- 3 148/DIG 55
- 3 257/209
- 3 365/103
- 3 438/215
- 2 148/DIG 1
- 2 257/751
- 2 257/752
- 2 257/764
- 2 327/525
- 2 438/281
- 2 438/601
- 2 438/624

28 257/530 (19 OR, 9 XR) Class 257: ACTIVE SOLID-STATE DEVICES 257/499 INTEGRATED CIRCUIT STRUCTURE WITH ELECTRICALLY ISOLATED COMPONENTS 257/528 .Passive components in ICs 257/529 ..Including programmable passive component (e.g., fuse) 257/530 ...Anti-fuse 14 438/600 (8 OR, 6 XR) Class 438: SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS 438/584 COATING WITH ELECTRICALLY OR THERMALLY CONDUCTIVE MATERIAL 438/597 .To form ohmic contact to semiconductive material .. Selectively interconnecting (e.g., 438/598 customization, wafer scale integration, etc.) 438/600 ... Using structure alterable to conductive state (i.e., antifuse) 13 257/50 (1 OR, 12 XR) Class 257: ACTIVE SOLID-STATE DEVICES 257/49 NON-SINGLE CRYSTAL, OR RECRYSTALLIZED, SEMICONDUCTOR MATERIAL FORMS PART OF ACTIVE JUNCTION (INCLUDING FIELD-INDUCED ACTIVE JUNCTION) 257/50 .Non-single crystal, or recrystallized, active junction adapted to be electrically shorted (e.g., "anti-fuse" element) 10 365/96 (4 OR, 6 XR) Class 365: STATIC INFORMATION STORAGE AND RETRIEVAL 365/94 READ ONLY SYSTEMS (I.E., SEMIPERMANENT) 365/96 .Fusible 7 365/225.7 (4 OR, 3 XR) Class 365: STATIC INFORMATION STORAGE AND RETRIEVAL 365/189.01 READ/WRITE CIRCUIT 365/225.7 .Having fuse element 7 438/131 (1 OR, 6 XR) Class 438: SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS 438/128 MAKING DEVICE ARRAY AND SELECTIVELY INTERCONNECTING 438/131 .Using structure alterable to conductive state (i.e., antifuse) 7 438/467 (0 OR, 7 XR) Class 438: SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS 438/466 DIRECT APPLICATION OF ELECTRICAL CURRENT 438/467 .To alter conductivity of fuse or antifuse

element